

of the book is diminished by the absence of literature citations in the body of the text. Those readers should consider that the book, already two-inches thick, would be considerably thicker, had this been done. Some readers may object to the occasional sprinkling of Mr. Schoenherr's philosophy and environmental ethic, but probably not those readers genuinely interested in California's natural environments.

Mr. Schoenherr has admirably fulfilled his objective to familiarize readers with this special place called California. It is apparent that this book was an immense undertaking, and no other single reference compares to it in terms of volume and informational content. After reading it, a person will be able to describe the climate, rocks, soil, plants, animals and biogeography of any area of California, and be able to explain how things got there and the ways in which they relate to each other. This book will foster appreciation for California's natural diversity, much of which is threatened. The breadth and depth of Mr. Schoenherr's writing makes this book essential reading for those of all interests and avocations, including experienced biologists, environmental professionals, students and naturalists.

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Interface Between Ecology and Land Development in California. Edited by JON E. KEELEY. 1993. Southern California Academy of Sciences, Los Angeles. 297 pages. \$28, ISBN 0-9626305-3-5 (hardcover).

In the preface to this book, Jon Keeley comments that "The interface between ecology and land development is a battleground of opposing interests and values, with factions fighting to ensure their own version of quality of life." The symposium from which this volume arose was convened to provide a forum which would bring together researchers, policy makers, conservationists and other interested parties and which would explore strategies to deal with the inherent battle between ecology and development. The resulting proceedings consists of 49 papers on a wide variety of topics, grouped under headings "Biodiversity and conservation," "Land management and land stewardship," "Wildlife and corridors," and "Mitigation and community restoration."

The book starts off with a keynote address on "Ecology and species extinction: a global perspective," by Peter Raven, which provides one of the most coherently-argued and well written essays on the value of biodiversity and the problems facing it that I have come across. Raven firmly asserts that the root cause of the current biodiversity crisis is the rapidly increasing human population, but also points to the failure of the United States to assess its own population increase or its per capita consumption. These problems are central to the question of development in California.

The remaining papers are written by people from a variety of backgrounds: academic biologists, consultants, state and local government personnel and representatives of a variety of conservation interest and lobby groups. Given such a range of backgrounds, it is inevitable that individual contributions will push particular barrows, and that a certain level of distrust and/or cynicism will come through. However, the overall tenor of the volume indicates the need for the various groups to work together if anything of lasting value is to be achieved. In particular, there is a strong call for scientists to become more involved in policy and advocacy. Scientists traditionally sit on the fence when faced with contentious issues, partly out of self-preservation, but also because they are reluctant to make "bottom line" statements in the face of complexity and uncertainty. However, there is a growing recognition that planning and management decisions are going to be made anyway, and it is better that they are made with some scientific input instead of in a knowledge vacuum. Dan Silver summed the situation up nicely: "Activism and advocacy in politics and conservation are simply a necessity, especially for scientists. If we are to save what's left of our nature in southern California, nobody will do it for us."

The volume is well produced and relatively free of typographical errors, although Parker's paper is missing the last half of the reference list. There is also no index, which could be a bit frustrating. The quality and content of the contributions vary enormously, and the book suffers somewhat from the emphasis in many papers on current contentious issues, often of a very local or transient nature. While these are the bread and butter of most conservation activities, they are usually ephemeral, and hence many of the issues raised in the 1992 conference are now out of date—e.g., Bartel's paper gives a pre-election viewpoint on the Endangered Species Act, Ross & Ross's paper on Mt Tamalpais contains an addendum which indicates that the problem they focussed on has now been largely resolved. While such contributions are still useful, they have a short shelf life. The value of many of the papers on local issues could also have been enhanced greatly by a consideration of their broader implications.

Despite this criticism there are many useful ideas and case studies in this volume. It contains material which will be of interest to anyone interested in conservation and land use issues, be they academics or practitioners. Case studies cited could be used as discussion papers for students at a variety of levels. Only a few papers left me completely cold—for instance, Cody's paper raking over the coals of the SLOSS debate left me asking "So what?" Many important questions were touched on throughout the volume. For instance, what should we be conserving—species, ecosystems, genes, communities? How do we deal with dynamic landscapes that operate on timescales longer than we are used to considering and much longer than the average political lifespan? How important are corridors? Is ecosystem restoration possible, and if so, what sort of ecosystem do we aim at—i.e., how do we define "natural?"

The book falls short of general conclusions on these topics. In fact, it would have benefitted greatly from a final paper which drew out these and other issues. In particular, I would have liked to see a discussion of the importance of considering ecological processes rather than ecosystems as static entities. For instance the papers by Parker and Ross & Ross provide an interesting contrast between a recognition of the importance of maintaining essential processes versus the desire to maintain the current status quo in a sort of embalmed limbo. Ross & Ross's paper considers the question of prescribed burning on Mt. Tamalpais and points out the potential risk to the plant species and communities there, but Parker also points out the essentially dynamic nature of vegetation, which implies that what is there today need not necessarily be there tomorrow. The recognition of the dynamic nature of natural ecosystems has profound implications for conservation management and policy. The question of what to do with flammable vegetation in built-up and suburban areas has also taken on a new perspective following the 1993 Los Angeles fires.

A further area of debate which could have been more fully explored was the difference in approach of various contributors to the ecology/development interface. Many contributors did, indeed, view it as a battleground, in which conservation is a constant war against development and mitigation is rife. An alternative viewpoint surfaced every so often which suggested that conservation could and should become more proactive, develop wider community support, and become part of the planning and development procedure. Indeed, I would argue that conservation must do this. Unless the community at large (and hence the majority of voters for politicians and consumers of the results of development) see the value in conserving natural ecosystems, conservation efforts will always be too little too late. Conservation has to become a way of life, not a side issue, if we want to conserve biodiversity in California, or anywhere else for that matter.

To the extent that this book contributes to the process of increasing communication between the different groups involved in conservation/development issues in California, it is certainly a step in the right direction. If California, with its renowned go-ahead attitudes and relative wealth, cannot get the balance between conservation and development right, then there is little hope for anywhere else.